James G. Retzloff and Scott T. Franson

Serial No.

09/809,454

Page

2

## IN THE CLAIMS:

Please cancel Claims 2-6, 9, 10, 13-28, 31-33, and 37-47. Please amend

Claims 7, 29, 30, 35, 36, and 48-51 as follows:

- 1. (previously cancelled).
- 2-6. (currently cancelled).
- 7. (currently amended) The concealed sprinkler head of claim <u>55</u> 47, <u>further comprising</u> wherein said body member has an inner surface and a spring positioned between said inner surface and said <u>housing mounting surface</u>, said spring configured to thrust said <u>cover plate</u> member away from said <u>housing mounting surface</u>.



- 8. (original) The concealed sprinkler head of claim 7, wherein said spring further comprises a first substantially linear section and a second substantially linear section joined by an arcuate section.
- 9-10. (currently cancelled)
- 11-12. (previously cancelled)
- 13-28. (currently cancelled)
- 29. (currently amended) A concealed sprinkler head comprising:
- a sprinkler body having <u>a central axis and</u> a central orifice <u>disposed about said</u> central axis, said central orifice <u>defining</u> with an inlet and an outlet, <u>and</u> said inlet configured for attachment to a fire extinguishing fluid supply line;
  - a deflector movably mounted to said sprinkler body;
  - a sealing assembly for sealing said outlet;
- a thermally sensitive trigger assembly configured to releasably urge said sealing assembly into sealing engagement with said outlet;

James G. Retzloff and Scott T. Franson

Serial No.

09/809,454

Page

3

a housing attached to said sprinkler body and having a bottom extending beyond said outlet, said thermally sensitive trigger assembly positioned between said outlet and said bottom of said housing; and

a cover plate removably mounted to said bottom of said housing, said cover plate having a planar central portion and a periphery extending around said central portion, said central portion having an outer surface lying in a plane generally orthogonal to said central axis, said plate further including arcuate portions extending inwardly from said periphery to said central portion, said arcuate portions projecting outwardly from said plane away from said sprinkler body in a direction generally along said central axis and forming a plurality of radially spaced and radially extending passageway sections having portions offset outwardly from said plane and in said direction and configured to enable air to travel between said periphery and said bottom of said housing and towards the thermally sensitive trigger assembly, wherein at least a section of said periphery projects outwardly from said planar portion away from said sprinkler body to thereby form at least one passageway section configured to enable air to travel between said passageway section and said bottom of said housing and towards said thermally sensitive trigger assembly.

30. (currently amended) The concealed sprinkler head of claim 29, wherein said cover plate has generally planar portions extending between said arcuate portions at least one passageway section projects radially outward from said bottom of said housing.

31-33. (currently cancelled)

- 34. (original) The concealed sprinkler head of claim 29, further comprising a spring positioned between said cover plate and said bottom of said housing, said spring configured to thrust said cover plate away from said bottom of said housing.
- 35. (currently amended): A concealed sprinkler head comprising:

a sprinkler body having a <u>central axis and</u> central orifice <u>disposed about said</u> <u>central axis, said central orifice defining with</u> an inlet and an outlet, said inlet configured for attachment to a fire extinguishing fluid supply line;



James G. Retzloff and Scott T. Franson

Scrial No.

09/809,454

Page

4

a deflector movably mounted to said sprinkler body;

a scaling assembly for sealing said outlet;

a thermally sensitive trigger assembly configured to releasably urge said sealing assembly into sealing engagement with said outlet;

a housing attached to said sprinkler body and having a bottom extending beyond said outlet, said thermally sensitive trigger assembly positioned between said outlet and said bottom of said housing; and

a cover plate removably mounted to said bottom of said housing, said cover plate having an inner surface facing said housing, an outer surface having planar portions, and a periphery, other portions of said plate projecting outwardly in a direction generally along said central axis away from said housing, said other portions forming passageway sections extending inwardly from said periphery wherein at least a section of said periphery is formed with at least one passageway section configured to enable air to travel between said periphery passageway section and said bottom of said housing and towards said thermally sensitive trigger assembly wherein said cover plate is formed with at least one undulation defining a ridge along said periphery, said ridge defining said at least one passageway section.

36. (currently amended) The concealed sprinkler head of claim 35, wherein said <u>cover plate</u> has an annular perimeter portion at least one undulation comprises comprising an undulating <u>outer surface forming</u> a plurality of <u>radially spaced</u> undulations <u>placed in spaced</u>, and said <u>undulations</u> forming said passageway sections relation.

37-47. (currently cancelled)

48. (currently amended) The concealed sprinkler head according to Claim 47 55, wherein said cover plate has an undulating surface, said undulating surface defining said at least one undulation comprises a plurality of radially spaced arcuate portions undulations placed in spaced relation.



James G. Retzloff and Scott T. Franson

Serial No.

09/809,454

Page

5

- 49. (currently amended) The concealed sprinkler head according to Claim 48 55, <u>further comprising a wherein said</u> plurality of <u>radially spaced generally planar portions extending inwardly from said perimeter edge and disposed between said radially spaced arcuate portions undulations are formed in a radial pattern.</u>
- 50. (currently amended) The concealed sprinkler head according to Claim 47 49, wherein said planar portions extend inwardly from said peripheral edge to body member comprises a central portion, said periphery section extending around said central portion, and said undulation extending through a portion of said central planar portion and said periphery section.
- 51. (currently amended) The concealed sprinkler head according to Claim 36, <u>further comprising generally planar portions extending between said passageway sections</u> wherein said plurality of undulations are placed in a radial spaced relation.
- 52. (new) The concealed sprinkler head according to Claim 30, wherein said planar portions extend between said periphery and said central portion.
- 53. (new) The concealed sprinkler head according to Claim 29, wherein said central portion comprises a generally planar central portion.
- 54. (new) The concealed sprinkler head according to Claim 35, wherein said other portions comprise arcuate portions.
- 55. (new) A concealed sprinkler head comprising:
- a sprinkler head body having an outlet opening and a central axis, said outlet opening disposed about said central axis;
- a housing mounted to said sprinkler head body and having a central passageway in communication with said outlet opening;
- a thermally sensitive trigger assembly operative to open and close said outlet opening; and

James G. Retzloff and Scott T. Franson

Scrial No.

09/809,454

Page

6

a cover plate mounted to said housing, said cover plate having a generally planar central portion, a perimeter portion extending around said planar central portion, and a peripheral edge extending around said perimeter portion, said cover plate further including an inner surface facing said housing and an outer surface, said planar central portion lying in a plane generally orthogonal to said central axis, said perimeter portion having a plurality of radially spaced arcuate portions extending between said central portion and said peripheral edge, said arcuate portions projecting outwardly from said plane to form a plurality radially spaced passageways extending inwardly from said peripheral edge to enable air to travel from said peripheral edge toward said thermally sensitive trigger assembly.

